B-1B Drops first GPS-guided JDAM

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ASC Public Affairs

A B-1B Lancer flying out of Edwards AFB, Calif., on Feb. 11 dropped a satellite-guided joint direct attack munition, or JDAM, at China Lake test range. The test was the first demonstration of the bomber's capability to deploy satellite-guided JDAMs.

Flying at 24,000 feet and at Mach 0.85, the B-1B hit its target within 22 feet of exact center. It impacted inside the aircraft revetment target, demonstrating an accuracy better than the test requirement. In a Jan 22. Test, the B-1B deployed a JDAM using inertial navigation.

"This event was extremely important to us as the first tangible result of our ongoing efforts to convert the B-1B from its previous nuclear penetration role to tomorrow's role as America's premier conventional munitions bomber," said Col. Ben F. McCarter, B-1B System Program Office director. "With the Conventional Mission Upgrade Program, no other weapon system will be able to match the B-1B's combination of speed, range, lethality, and cost-effectiveness."

Additional tests over the next five months will lead to the B-1B's operational use of JDAMs in December.

A B-1B bomber can carry 24 JDAMs - eight in each of its three large weapons bays. A typical B-1B mission might involve targets such as airplane shelters, bridge revetments or command bunkers.

JDAM uses global positioning system/inertial navigation system to home in on its targets with a high degree of accuracy. Each JDAM carries a 2,000-pound warhead and can be expected to destroy or disable military targets within a 40-foot radius of its point of impact.

JDAM uses a low-cost guidance kit produced by Boeing to convert existing, unguided, free-fall bombs such as Mk 83 and BLU-110 1,000-pound bombs and Mk 84 and BLU-109 2,000-pound bombs into accurately guided "smart" weapons. JDAMs can be dropped from more than 15 miles from the target, with updates from GPS satellites guiding the bombs to their target.

This JDAM drop is part of the B-1B Conventional Mission Upgrade Program, which is managed here by the B-1B System Program Office. "CMUP includes an upgrade to the communications system, the integration of GPS and JDAM capabilities, and a conversion to a (military standard) 1760 electrical interface for JDAM and other 'smart' weapons on the B-1B," said Lt. Col. Ernest Speck, chief of the JDAM 1760 upgrade program. "CMUP later will include new computers, a defensive system upgrade, and the integration of other weapons such as the wind corrected munitions dispenser, joint standoff weapon and the joint air-to-surface standoff munition."

The JDAM program is nearing the end of its development phase. More than 250 flight tests involved five Air Force and Navy aircraft. The Feb. 11 drop was the 122nd guided JDAM launch. Early operational capability JDAMs have been delivered to Whiteman Air Force Base, Mo., and low-rate, initial production JDAM deliveries begin in May.